

Q1119-FSxxL-H AO Q-SWITCH



1106

The Q1119-FSxxL series are longitudinal (compressional) mode Fused Silica, conduction cooled acousto-optic Q-switches designed for use with polarized DPSS Nd:YLF and Nd:YAG lasers. These devices exhibit very low insertion loss and high damage threshold. All Isomet AO Q-switches benefit from the company's unparalleled experience in OEM manufacturing, with all key processes maintained in-house. These include optical fabrication, A/R coating and proven high power transducer bonding technology.

Specifications

Acoustic Frequency:	24.0, 27.12, 40.68 or 80.0MHz	
Interaction Material:	Fused Silica	
Wavelength:	1047nm to 1064nm	
A/R Coating:	< 0.2% / surface	
Active Aperture, H:	1.0, 1.5 mm *	
Clear Aperture:	4.5mm	
Acoustic Mode:	Longitudinal (compressional)	
Rise/Fall time:	109nsec / mm beam waist	
Polarization:	Linear	
Transmission:	> 99.5% (single pass)	
Cavity Insertion Loss:	10% max, <5% typical	
Damage Threshold:	> 500MW/cm ²	
RF power	Up to 7W (max)	
Diffraction Efficiency:	<u>H=1mm</u>	<u>H=1.5mm</u>
RF = 3W	>40%	>30%
RF = 5W	>60%	>45%
RF = 7W	>70%	>55%
Cooling:	Conduction	
Input Impedance:	50 Ohms	
VSWR:	< 1.2:1	
Model Selection:		

	<u>Freq</u>	<u>Active Aperture</u>	
Q1119 - FS	xx	L - H	
24.0MHz	24	1.0	1.0mm
27.12MHz	27	1.5	1.5mm
40.68MHz	40		
80.0MHz	80		

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

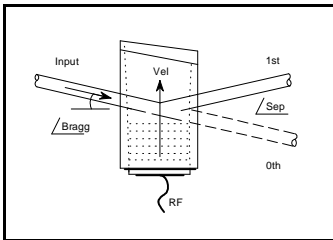
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding

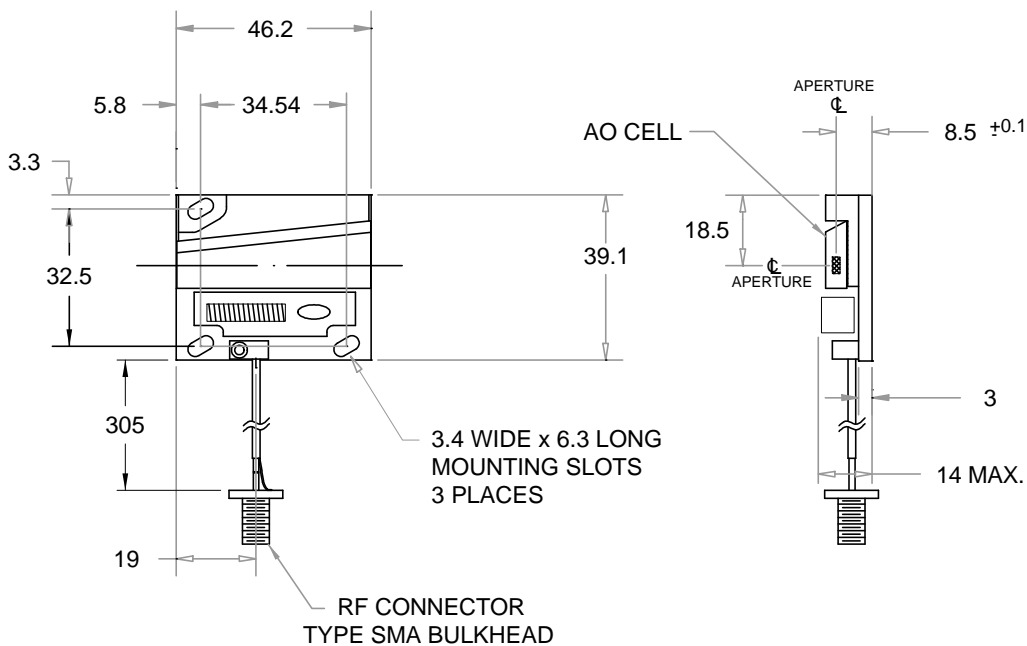


Q1119-FSxxL-H AO Q-SWITCH



1106

Outline Drawing



Dimensions: mm

Ensure adequate heaksinking through mounting surface, especially at higher RF powers.

Recommended Drive Electronics

RF Driver with Waveform Generation
RF Driver with Basic Modulation control

AQS1010-FC-x
RFA910-FC-x

* Please contact Isomet for alternative apertures.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

**In-house: Crystal Growth,
Optical Polishing,**

A/R coating, Vacuum Bonding